

## No. 1

### Editorial

What is the quality of quality control procedures?: <i>C.-H. de Verdier, T. Groth &amp; J. O. Westgard</i> ... ... ... ...	1
Comparison of the PI patterns of $\alpha_1$ -antitrypsin on acid starch gel electrophoresis and isoelectric focusing: <i>R. R. Frants, G. J. M. Hoogwinkel &amp; A. W. Eriksson</i> ... ... ...	15
Pre-operative exercise testing in patients suspected of arteriosclerotic heart disease: methods, risks and reproducibility: <i>N. E. Bille-Brahe, J. H. Eickhoff &amp; H. C. Engell</i> ... ... ...	21
Enzymatic studies on possible improvement of cytosine arabinoside treatment: <i>J. Mejer</i> ...	29
The stability of blood, plasma and serum constituents during simulated transport: <i>P. Felding, P. Hyltoft Petersen &amp; M. Hørder</i> ... ... ...	35
Plasma enzymes in myocardial infarction. An appraisal of quantitative, clinical and pathophysiological information: <i>M. Hørder, P. Hyltoft Petersen, K. Thygesen &amp; B. Lyager Nielsen</i> ... ... ...	41
Plasma ionized calcium in the critically ill on total parenteral nutrition: <i>A. J. Crottogini &amp; O. Siggaard-Andersen</i> ... ... ...	49
Clinical chemical analyses of serum obtained from capillary versus venous blood, using Microtainers® and Vacutainers®: <i>D. K. Falch</i> ... ... ...	59
The binding of high density lipoproteins to isolated rat hepatocytes: <i>L. Ose, I. Røken, K. R. Norum, C. A. Drevon &amp; T. Berg</i> ... ... ...	63
Studies of monoclonal and polyclonal anti-digoxin antibodies for serum digoxin radioimmunoassay: <i>B. E. Bång, M. Hurme, K. Juntunen &amp; O. Mäkelä</i> ... ... ...	75
Myoglobin kinetics in patients suffering from acute myocardial infarction in its early phase—as studied by the single injection method: <i>T. Groth &amp; C. Sylvén</i> ... ... ...	79
Effect of intravenous melperone on atrial repolarization in man: <i>N. Edvardsson &amp; B. Olsson</i> ...	87
Reliability of routine clearance methods for assessment of glomerular filtration rate in advanced renal insufficiency: <i>J. Brøchner-Mortensen &amp; G. Freund</i> ... ... ...	91

## No. 2

### Editorials

Alcohol and sex hormones: <i>M. Välimäki &amp; R. Ylikhari</i>	99
Experiences with the Scandinavian recommended methods for determinations of enzymes in blood. A report by the Scandinavian Committee on Enzymes (SCE): <i>M. Hörder, W. Gerhardt, M. Häkkinen, E. Magid, E. Pitkänen, J. H. Strömm, L. Theodorsen &amp; J. Waldenström</i>	107
Propionyl-CoA carboxylase deficiency: case report, effect of low-protein diet and identification of 3-oxo-2-methylvaleric acid, 3-hydroxy-2-methylvaleric acid and maleic acid in urine: <i>T. Bergsirøm, J. Grenten, A.-H. Levin, G. Steen, N. Tryding &amp; U. Wass</i>	117
The use of [ $^{99m}\text{Tc}$ ] (2,6-diethylacetanilide)-imino diacetic acid ( $^{99m}\text{Tc}$ HIDA) in evaluating normal hepatobiliary dynamics: <i>J. Schoubye, E. Oester-Joergensen &amp; S. A. Pedersen</i>	127
Muscle metabolism during exercise in men operated upon for coarctation of the aorta in childhood: <i>B. O. Eriksson &amp; E. Hanson</i>	135
Variability of plasma proteins according to molecular size. Long-term and short-term intra-individual variation: <i>P. Hyltoft Petersen, U. Feldt-Rasmussen, M. Hörder, O. Blaabjerg &amp; K. Thygesen</i>	143
A sensitive and simplified receptor assay for $1,25(\text{OH})_2$ vitamin D: <i>J. T. Dabek, M. Häkkinen &amp; H. Adlercreutz</i>	151
The activities of $\delta$ -aminolaevulinic acid synthase and haem synthase in experimental sideroblastic anaemia. Effect of mitochondrial iron excess on the enzyme activity in peripheral red blood cells: <i>A. V. O. Pasanen</i>	159
Age dependence of human plasma renin substrate: <i>I. Immonen, F. Fyhrquist, M. Pohjavuori &amp; O. Simell</i>	167
The effect on responsivity of the $\text{P}_{\text{tc}}\text{O}_2$ electrode by an increased pressure on the electrode membrane: <i>O. Löfgren</i>	171
Determination of pressure gradient in the Hancock mitral valve from noninvasive ultrasound Doppler data: <i>J. Holen, S. Simonsen &amp; T. Fröysaker</i>	177
Concentrations of baclofen in serum and breast milk from a lactating woman: <i>G. Eriksson &amp; C.-G. Swahn</i>	185
Scintillation camera renography with $^{99m}\text{Tc}$ -DTPA and $^{131}\text{I}$ -Hippuran: <i>C. G. Bratt, I. Larsson &amp; T. White</i>	189
Transcutaneous measurement of arterialized capillary blood $\text{PCO}_2$ by a new mass spectrometer inlet system: <i>J. S. Lundsgaard &amp; J. Grönlund</i>	199
Fourier-analysis of peristaltic pressure variations in the oesophagus during a 12-hour investigation. A study in normal subjects: <i>T. Madsen &amp; L. Wallin</i>	203
The effect of sulphydryl blocking agents on the uptake of L-carnitine in an established human cell line (CCL 27): <i>U. Kjernes &amp; P. Mølstad</i>	209

### No. 3

Bone mineral content in relation to age and menopause in middle-aged women: <i>O. Lindquist, C. Bengtsson, T. Hansson &amp; B. Roos</i> .....	215
Effects of physical training on plasma citrate and exercise-induced asthma: <i>J. M. Henriksen, T. Toftsgaard Nielsen &amp; R. Dahl</i> .....	225
Plasma erythropoietin levels in mice. Response to hypoxia at different ages: <i>A. Meberg &amp; P. Hågård</i> .....	231
Pulmonary surfactant release in fetal rabbits as affected by terbutaline and aminophyllin: <i>L. Ekelund, R. Burgoyne, D. Brymer &amp; G. Enhörning</i> .....	237
Argyria—tissue deposition of silver as selenide: <i>J. Aaseeth, A. Olsen, J. Halse &amp; T. Hovig</i> ..	247
The magnitude of metabolically induced changes in the density of human low-density lipoproteins: <i>P. Weech, G. Mills, H. Meinertz &amp; O. Faergeman</i> .....	253
Lipoprotein lipase activity in adipose tissue and skeletal muscle of human diabetics during insulin deprivation and restoration: <i>M.-R. Taskinen, E. A. Nikkilä, R. Nousiainen &amp; A. Gordin</i> .....	263
Determination of glucose in dried filter paper blood spots: <i>A. S. Åbyholm</i> .....	269
Radioreceptor assay for benzodiazepines in biological fluids using a new dry and stable receptor preparation: <i>J. Lund</i> .....	275
Daily plasma citrate rhythms in man during feeding and fasting: <i>T. Toftsgaard Nielsen &amp; N. Schwartz Sørensen</i> .....	281
Increased transvascular escape rate of albumin during experimental portal and hepatic venous hypertension in the pig. Relation to findings in patients with cirrhosis of the liver: <i>J. H. Henriksen, H.-H. Parving, L. Christiansen, K. Winkler &amp; N. A. Lassen</i> .....	289
Reference values for erythrocyte acetylcholinesterase and plasma cholinesterase activities in children, implications for organophosphate intoxication: <i>R. Lund Karlsen, S. Sterri, S. Lyngaa &amp; F. Fonnum</i> .....	301
Relationship of high density lipoprotein cholesterol concentration to the duration and intensity of endurance training: <i>K. Myhre, O. D. Mjøs, G. Bjørsvik &amp; S. B. Strømme</i> ..	303
The effect of IgG, F(ab') <sub>2</sub> and serum on the glucose metabolism in human leucocytes: <i>B. Kjøsen &amp; H. H. Bassøe</i> .....	311

### Technical Notes

Decrease in the NADH <sub>2</sub> absorbance in enzymatic blood glucose determination using the glucose dehydrogenase end point method: <i>I. Liimatainen</i> .....	319
Fluoroimmunoassay of pregnancy zone protein: <i>O. Berg &amp; L. Hemmingsen</i> .....	323

## No. 4

Serum lysozyme: evaluation of a nephelometric assay: <i>S. Reitamo, M. Lalla &amp; A. Huipero</i> ...	329
Continuous intra-arterial pH-monitoring using monocrystalline antimony as sensor: <i>E. Nilsson &amp; G. Edwall</i> ...	333
Analysis of urinary calculi; a quality control programme: <i>A. Uldall</i> ...	339
Disulphide reduction in glutathione-deficient erythrocytes from a patient with pyroglutamic acidemia: <i>S. Marstein</i> ...	347
Comparison of different analytical and precipitation methods for direct estimation of serum high density lipoprotein cholesterol: <i>I. M. Penttilä, E. Voutilainen, P. Laitinen &amp; P. Juutilainen</i> ...	353
Specimen handling for the assay of adenylates and glycerate 2, 3-bisphosphate in erythrocytes: <i>Å. Ericson &amp; C.-H. de Verdier</i> ...	361
Determination of sulphate and uronic acid in glycosaminoglycans of human dermis and in urine: <i>J. H. Poulsen</i> ...	367
Beneficial effects of vagal stimulation on the ischaemic myocardium during beta-receptor blockade: <i>J. K. Kjekshus, A. S. Blix, P. Grottum &amp; A. O. Aasen</i> ...	383
Variations in single fibre areas and fibre composition in needle biopsies from the human quadriceps muscle: <i>J. Halkjaer-Kristensen &amp; T. Ingemann-Hansen</i> ...	391
Angiotensin-converting enzyme in acute myocardial infarction and angina pectoris: <i>F. K. Romer &amp; H. J. Kornerup</i> ...	397
Screening for thyroid disorders in middle-aged women by computer-assisted evaluation of a thyroid hormone panel: <i>B. Kågedal, J. C. Månsen, A. Norr, B. Sörbo &amp; L. Tegler</i> ...	403
A comparison of four different blood gas analysers: <i>J. Kofstad</i> ...	409
Human adipose tissue blood flow during prolonged exercise, III. Effect of $\beta$ -adrenergic blockade, nicotinic acid and glucose infusion: <i>J. Bulow</i> ...	415

## No. 5

Stability of serum and blood constituents during mail transport: <i>B. Berg, B. Estborn &amp; N. Tryding</i> ... ... ... ... ... ... ...	425
Myocardial release of citrate and lactate during atrial pacing induced angina pectoris: <i>J. P. Bagger, T. Toftegaard Nielsen, P. Henningsen, P. E. B. Thomsen &amp; K. Eyjolfsson</i> ... ...	431
A stable, reproducible radioreceptorassay for thyrotropin binding inhibiting immunoglobulins (TBII): <i>H. Bliddal</i> ... ... ... ...	441
Determination of haemoglobin A <sub>1c</sub> by iso-electric focusing. Effect of incubation of erythrocytes and comparison of results obtained by ion-exchange chromatography: <i>H. B. Mortensen &amp; P. Aa. Svendsen</i> ... ...	451
Effect of digoxin upon intracellular potassium in man: <i>F. Ericsson, B. Carlmark, T. Jøgestrand &amp; K. Sundqvist</i> ...	457
Insolubilized pure human intrinsic factor used for quantitation of cobalamins in serum: <i>E. Nexø &amp; P. Gimsing</i> ...	465
Antithrombin III concentrate: its catabolism in health and in antithrombin III deficiency: <i>L. Tengborn, B. Frohm, L. E. Nilsson &amp; I. M. Nilsson</i> ...	469
Myoglobin in human skeletal muscle: <i>P. Möller &amp; C. Sylvén</i> ...	479
Free thyroxine, thyroxine/TBG ratio and other <i>in vitro</i> tests of thyroid function evaluated by discriminant analysis: <i>K. Rootwelt &amp; H. E. Solberg</i> ...	483
Effects of exercise on urinary excretion of albumin and $\beta_2$ -microglobulin in young patients with mild essential hypertension without treatment and during long-term propranolol treatment: <i>E. B. Pedersen, C. E. Mogensen &amp; J. S. Larsen</i> ...	493
Macro creatine kinase BB isoenzyme in serum: most likely an antigen-autoantibody complex: <i>P. Urdal</i> ...	499
Comparison of different components in the fractional conversion of mevalonate to cholesterol with cholesterol synthesis and serum methyl sterols: <i>T. A. Miettinen &amp; R. Tilvis</i> ...	507

## Technical Notes

A rapid method for the determination of urea stable lactate dehydrogenase on the 'Cobas Bio' centrifugal analyser: <i>R. Lund Karlsen, L. Nørgaard &amp; E. B. Gulbrandsen</i> ...	513
Immunoassay for transferrin using LKB 8600 Reaction Rate Analyzer: <i>A. Harmainen, M. Perko, H. Jokela &amp; T. Koivula</i> ...	517

## No. 6

### Editorial

The mechanism of renal autoregulation: <i>F. Kiil</i> .....	521
Conditions for humoral $\alpha$ -adrenoceptor stimulation of renin release in anaesthetized dogs: <i>Ø. Langård, H. Holdaas, I. Eide &amp; F. Kiil</i> .....	527
Conditions for stimulation of renin release by cyclic AMP in anaesthetized dogs: <i>Ø. Langård, H. Holdaas, I. Eide, &amp; F. Kiil</i> .....	535
Application of the law of mass action to design and performance of receptor assays for 1,25 (OH) <sub>2</sub> vitamin D: <i>J. T. Dabek, M. Härkönen &amp; H. Aldercreutz</i> .....	543
Skeletal muscle lactate dehydrogenase isozymes and fibre composition in viral, mycoplasma and bacterial infections in young and old men: <i>G. Friman, N.-G. Ilbäck &amp; L. Pilström</i> .....	551
Polarographic pO <sub>2</sub> sensors with heparinized membranes for <i>in vitro</i> and continuous <i>in vivo</i> registration: <i>E. Nilsson, G. Edwall, R. Larsson &amp; P. Olsson</i> .....	557
Metabolic responses to bicycle exercise after several days of physical work and energy deficiency: <i>T. O. Rognum, O. Vaage, A. Höstmark &amp; P. K. Opstad</i> .....	565
The hepatic glutathione content in liver diseases: <i>H. E. Poulsen, L. Ranek &amp; P. B. Andreasen</i> .....	573
Comparison of a receptor binding assay with a radioimmunoassay for measuring human epidermal growth factor-urogastrone in urine: <i>E. Nexø, S. I. Lamberg &amp; M. D. Hollenberg</i> .....	577
Exercise-induced proteinuria in children and adolescents: <i>N.-P. Huttunen, M.-L. Kääri, M. Pietiläinen, P. Vierikko &amp; M. Reinilä</i> .....	583
Increased extravasation and lymphatic return rate of albumin during diuretic treatment of ascites in patients with liver cirrhosis: <i>J. H. Henriksen &amp; P. Schlichting</i> .....	589
The effect of ascitic fluid hydrostatic pressure on albumin extravasation rate in patients with cirrhosis of the liver: <i>J. H. Henriksen, H.-H. Parving, L. A. Christiansen, N. A. Lassen, H. Ring-Larsen &amp; K. Winkler</i> .....	601

### Technical Note

Reference values for <sup>51</sup> Cr-EDTA clearance as a measure of glomerular filtration rate: <i>G. Granerus &amp; M. Aurell</i> .....	611
---	-----

## No. 7

### Editorial

Mechanism of renin release during renal nerve stimulation in dogs: <i>H. Holdaas, Ø. Langård, I. Eide &amp; F. Kjell</i>	617
Albumin excretion and renal haemodynamic response to physical exercise in normal and diabetic man: <i>E. Vittinghus &amp; C. E. Mogensen</i>	627
Characteristics of doxorubicin transport in human red blood cells: <i>M. Dalmark</i>	633
Postischaemic hyperaemia studied with a transcutaneous oxygen electrode used at 33–37°C: <i>U. Ewald, G. Rooth &amp; T. Tuvelmo</i>	641
An artificial betacell: assessment of the glucose analyser, infusion system and optimization of constants for the algorithms: <i>J. Sandahl Christiansen, P. Aaby Svendsen, U. Søgaard, M. Frandsen, E. Mathiesen, K. Winther &amp; T. Deckert</i>	647
Lipoproteins and cholesterol esterification rate in men and women with hypercholesterolaemia of type IIa: <i>B. Moberg &amp; L. Wallentin</i>	655
Effects of oral contraceptive combinations containing levonorgestrel or desogestrel on serum proteins and androgen binding: <i>E. W. Bergink, P. Holma &amp; T. Pyörälä</i>	663
Responses of plasma adenosine 3',5'-monophosphate, blood glucose and plasma insulin to glucagon in humans: <i>O. Sovik, E. Heiervang, L. Aksnes &amp; S. Selvig</i>	669
An electrophoretic fraction of urinary glycosaminoglycans reflecting connective tissue turnover: <i>J. Hjelm Poulsen</i>	675
Purification and characterization of an acid glutathione S-transferase from human lung: <i>K. Koskela, E. Valmet &amp; R. Tenhunen</i>	683
Glucose tolerance, plasma insulin and C-peptide during chloroquine treatment of rheumatoid arthritis: <i>U.-B. Ericsson, L.-O. Almér &amp; F. A. Wollheim</i>	691
Comparisons of muscle substrate levels, muscle enzyme activities and muscle morphology in arm and leg muscles in normal subjects and in patients operated upon for coarctation of the aorta in childhood: <i>B. O. Eriksson, L.-G. Friberg, E. Hansson &amp; G. Mellgren</i>	695
<i>In vivo</i> oxygen dissociation curve for whole fetal blood: fitting the Adair equation and blood gas nomogram: <i>W. Käsinger, R. Huch &amp; A. Huch</i>	701

## No. 8

Changes in plasma high density lipoproteins and lipolytic enzymes after long-term, heavy ethanol consumption: <i>R. Ekman, G. Fex, B. G. Johansson, P. Nilsson-Ehle &amp; J. Wadstein</i> ...	709
Coulter counter model S and model S-plus measurements of mean erythrocyte volume (MCV) are influenced by the mean erythrocyte haemoglobin concentration (MCHC): <i>T. Arnfred, S. D. Kristensen &amp; V. Munck</i> ...	717
A unique high-titer antiserum to gastrin: <i>J. F. Rehfeld</i> ...	723
Female sex hormones and the erythrocyte sedimentation rate. Results from a population study of women in Göteborg, Sweden: <i>V. Rafnsson &amp; C. Bengtsson</i> ...	729
Plasma enzymes in myocardial infarction. Application of a two-compartment model in assessing myocardial release of enzyme: <i>P. Hyltoft Petersen, M. Hørder, K. Thygesen, B. Lyager Nielsen &amp; L. Hansen</i> ...	735
Transcutaneous oxygen tension (tcPo <sub>2</sub> ) measurements on the foot in normal subjects and in patients with peripheral arterial disease admitted for vascular surgery: <i>J. H. Eickhof &amp; H. C. Engell</i> ...	743
Computerized 12-hour simultaneous ECG, pressure- and pH-probe investigation of the oesophagus. Method and reference values in healthy individuals: <i>S. Aggestrup, H. E. Carstensen, A. Sørensen &amp; H. R. Sørensen</i> ...	749
Effect of proctolol on blood flow distribution in the myocardium during acute regional ischaemia in cats: <i>L. Stangeland, K. Grong, K. S. Andersen &amp; J. Lekven</i> ...	757
Anti-basement membrane antibody: immunoenzymatic assay and specificity of antibodies: <i>J. Wieslander, P. G. Bygren &amp; D. Heinegård</i> ...	763
Synthesis of <sup>125</sup> I-reverse T <sub>3</sub> using a low and a high 3,3'-di-iodothyronine/ <sup>125</sup> I ratio: <i>P. Laurberg</i> ...	773
Urinary excretion of albumin, beta-2-microglobulin and light chains in pre-eclampsia, essential hypertension in pregnancy and normotensive pregnant and non-pregnant control subjects: <i>E. B. Pedersen, A. B. Rasmussen, P. Johannessen, S. Kristensen, J. G. Lauritsen, C. E. Mogensen, K. Solling &amp; M. Wohlert</i> ...	777
Diagnostic value of a test-strip in detecting increased urinary excretion of albumin, IgG and β <sub>2</sub> -microglobulin in patients with suspected proteinuria: <i>L. Hemmingsen &amp; P. Skaaup</i> ...	785
 Technical Note	
A comparison of a new miniphotometer (Compur M 1002) with the routine laboratory method for blood glucose determination: <i>K. Kølendorf, S. Clausen &amp; A. Svenssingen</i> ...	791

